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AUTHOR	Capraro, Robert M.; Capraro, Mary Margaret; Lamb, Charles E.
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ABSTRACT

This paper establishes a use for digital video in developing preservice teacher metacognition about the teaching process using a lesson plan-rating sheet as a guide. A lesson plan was developed to meet the specific needs of the methods instructors in a professional development program at a large public institution. The categories listed on the lesson planning document are: Instructional Objectives; State Objectives; Materials; Background Information; Learning Environment; Focus; Teaching Procedure; Explanation and Practice; Elaboration; Closure; and Assessment. After a semester of using the document, several of the methods instructors believed that preservice teachers were not successfully engaging in lesson planning and not displaying thought processes conducive to cogent, sequential, and organized lesson development. This need precipitated the development of a lesson plan-rating sheet. The lesson plan-rating sheet is based on the original lesson plan form with the addition of indicators. Those indicators are intended to focus the rater's attention on the details of lesson planning and to act as a tool to encourage discourse surrounding effective lesson planning and delivery of instruction in ä mathematics methods course. Inter-rater reliability of the instrument was determined to be adequate, ranging from 0.83 to 0.98. Preservice teachers exhibited marked improvements in metacognitive processes relating to writing of lesson plans and engaged in greater critical analyses of the mentor teachers and themselves. Preservice teachers became better consumers of field placement experiences. The study indicates that videotapes can be used effectively to assist preservice teachers in becoming reflective practitioners. Participant demographics and the inter-rater reliability by category for lesson plan rating ïnstrument are tabulated. Appendixes include the lesson plan form and the lesson plan-rating scale. (Contains 16 references.) (Author/AEF)

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Digital Video: Watch Me Do What I Say!

Robert M. Capraro, Mary Margaret Capraro, and Charles E. Lamb
Texas A&M University

Paper presented at the Consortium of State Organizations for Texas Teacher Education, October 14-16, 2001, Corpus Christi, TX.

Inquires concerning this paper should be addressed to the authors at College of Education, Texas A&M University, 4232 TAMU, College Station, TX, 77843-4232, (979) 845-8007. E-mail rcapraro@coe.tamu.edu; mmcapraro@coe.tamu.edu; celamb@coe.tamu.edu.

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Abstract

This paper establishes a use for digital video in developing perservice teacher metacognition about the teaching process using a lesson plan-rating sheet as a guide. Inter-rater reliability of the instrument was determined to be adequate ranging from .83 to .98. Preservice teachers exhibited marked improvements in metacognitive processes relating to writing of lesson plans and engaged in greater critical analyses of the mentor teachers and themselves. Preservice teachers became better consumers of field placement experiences.

Digital Video: Watch Me Do What I Say!

Introduction

"People seldom improve when they have no model to copy but themselves" (Lincoln & Suid, 1986 pg.15). Education students must handle many different problems during their field experiences and ultimately future careers. "Because teaching and learning in increasingly diverse contexts are complex, prospective teachers cannot come to understand the dilemmas of teaching only through the presentation of techniques and methods" (Harrington, 1995, pg. 203). To be effective, preservice teachers must comprehend the awesome responsibilities and situations that lie ahead. Field-based assignments and clinical internships have provided students with limited opportunities due to their unique placements (Feiman, Nemser, & Buchmann, 1986). Linking theory to practice by studying written case studies has added to these future teachers' repertoire of teacher education and knowledge (Merseth 1996). But as the saying goes, "a picture is worth a thousand words" and "a good example has twice the value of good advice" (Lincoln & Suid, pg.44), videotapes can now provide glimpses into a variety of classroom settings and situations. Video case studies are used more frequently to supplement the pedagogical and content knowledge future teachers acquire in their professional development courses (McIntyre, Byrd, and Fox, 1996) in addition to field based/clinical experiences.

A teacher should be a reflective practitioner who constantly evaluates the effects of his or her decisions and actions on others. This reflective practice assists the teacher in developing professionally (McLaughlin & Vogg, 1998). Videotapes are one means of supporting future teachers to become more reflective of their actions. Miels (1999) found that when university professors had preservice students view and discuss videotaped segments, they found the experience positive in introducing them to the "intricacies of teaching and learning" (pg.181). Education students were able to make connections between what was covered in methods classrooms and what they saw on the tapes. Students found that discussing this relationship provided them with valuable experiences (Kasten & Ferraro, 1995). Using videotape vignettes of best practices provided multiple opportunities for reflection. "Professional qualities necessary to lead in the 21st century do not develop naturally but must be guided, modeled, and facilitated though the use of real-life teaching situations" (Miels, 1999, pg.181).

Ball (1996) saw reflection as critical to understanding reform teaching and learning. A combination of field-based experiences and videotape self-assessment supported the reflection process, which builds the kind of teacher change necessary for educational reform (Wedman, Espinosa, & Laffey, 1999; Jenson, 1994). Through assessing a videotaped lesson, Zuckerman (1997) found that besides modeling "progressive teaching practices and documenting their benefits, novice teachers need to

be able to articulate the epistemological, sociological, and psychological arguments that justify reform" (pg.26).

One of the ways Webb, Diana, Luft, Brooks, & Brenna (1997) used videotapes for teacher training was to encourage teachers to focus on their own content and pedagogy and realistically "increase the metacognitive monitoring process that appears to be central to learning, thereby increasing confidence and performance"(pg. 97). Preservice teachers need to be able to reflect on their practices and the practices of others while understanding the intricacies of lesson development. With these understandings they have the ability to maximize their field placement experiences.

Instrumentation

A lesson plan was developed to meet the specific needs of the methods instructors in a professional development program at a large public institution. The lesson plan is the result of input from the mathematics, science, social studies, and language arts instructors (See Appendix A). It was determined by those involved in the lesson plan form design that the included categories are important to the development of mental schema for preservice teachers beginning a field placement that precedes their student teaching semester. The categories listed on the lesson planning document are: a) Instructional Objectives, b) State Objectives, c) Materials, d) Background Information, e) Learning Environment, f) Focus, g) Teaching Procedure, h) Explanation and Practice i) Elaboration, j) Closure, and k) Assessment. After a semester of using the document,

several of the methods instructors believed that preservice teachers were not successfully engaging in lesson planning and not displaying thought processes conducive to cogent, sequential, and organized lesson development. This need precipitated the development of a lesson plan-rating sheet. The lesson plan-rating sheet is based on the original lesson plan form with the addition of indicators. Those indicators are intended to focus the rater's attention on the details of lesson planning and as a tool to encourage discourse surrounding effective lesson planning and delivery of instruction in the mathematics methods course (See Appendix B).

Methodology

Both qualitative and quantitative data were collected. First, quantifiable data were collected in an attempt to verify dependability of the lesson plan-rating sheet to deliver consistent scores that could be considered reliable. Second, qualitative data were collected to determine the impact of a combined lesson plan-rating sheet and digital video intervention on preservice teacher facility with lesson planning and reflective thinking. The quality of preservice teachers' lesson planning documents was compared on pre-lesson plan rating experiences versus post- lesson plan rating experiences. Three sample lesson plans were selected pre and post and retyped (n=6), changing identifying characteristics without modifying any of the salient content. The page layout of the lessons were changed to make all six lesson plans appear as though they were written by

the same person. Each preservice teacher then ranked the lesson plans from highest to lowest in ease of use, completeness, and accuracy.

Learning to recognize various aspects of lesson planning for preservice teachers is important to their professional development. Many veteran teachers exhibit the various lesson plan components without the need to engage in lengthy lesson plan writing. In fact, many veteran teachers plan minimally using paper and pencil but may spend many hours developing, thinking about, and gathering material to teach a lesson. This aspect of lesson planning is not directly observable by preservice teachers in a field experience setting. Therefore, preservice teachers may not recognize the importance of lesson planning and may begin their careers at a disadvantage, believing that detailed lesson planning is a hurdle solely encountered in the methods block.

The lesson plan-rating form is based on the required lesson plan and intended to assist preservice teachers in recognizing the essential components of lesson development and to provide an opportunity for candid discourse.

All the videos were of veteran teachers in a local public school. The school has four six- grade teachers and three of the four teachers volunteered to have several lessons digitally videotaped for research purposes. The teachers were not asked to modify their lessons and were not provided copies of the lesson plan or the rating document. Each classroom teacher was digitally video taped two times while teaching mathematics. All

three teachers were using lessons from the *Connected Mathematics* program (Lappan, Fey, Fitzgerald, Friel, & Phillips, 1998).

The videotaped lessons ranged in length from 60-90 minutes. These lessons were viewed by a researcher from the project, edited, and divided into vignettes that illustrate various components of the lesson planning process. In part, omitting phenomena not considered for this study shortened the vignettes. The edited vignettes were then posted to a secure website. Thirty preservice teachers then viewed each vignette taken from the original lesson in the sequence the lesson actually occurred at each preservice teacher's convenience via the World Wide Web (WWW). After all the lessons were viewed, access was limited to the lesson being discussed for that week. Before beginning the first actual observation using the lesson plan rating document, preservice teachers discussed the indicators and their interpretations. Various aspects and questions arose as preservice teachers attempted to understand the criteria.

The preservice teachers rated three of the lessons – one lesson by each of the three classroom teachers. In an attempt to determine inter-rater reliability, preservice teachers discussed their rating for each category and explained how and why they responded as they did in a process called "rater reconciliation".

As a result of using digital video, students were able to access the video vignettes on the internet. This method allowed preservice teachers to view the material in relative anonymity and privacy without hearing comments from their peers. In essence, when the

preservice teachers came together and viewed the video for rating purposes they were familiar with the content but without bias that may have resulted from a mass preview which may have resulted in comments or parting discussions. The internet viewing allowed the preservice teachers to individually review the video after the discussion for clarification or examples.

The instructions for discussing the categories and the indicators were for preservice teachers to discuss what they believed to be the intent of the category and the indicators. The preservice teachers could argue for or against a particular point of view, or they could agree to allow understandings of the category and indicators to evolve as the videos were viewed.

Participants

Thirty preservice teachers enrolled in a senior mathematics methods course participated in the lesson plan rating. The demographics for preservice teacher participants are listed in Table 1. The sample was mostly white, mostly middle class, and all female. Two students would be considered non-traditional, one older than 25 and the other being older than 40 years of age. Other than Caucasian, the only other ethnic group represented was Hispanic, which was composed of three Mexican-Americans. The majority of the preservice teachers were not employed but relied on parental or spousal support. Only three reported that they needed to work, two indicated that they worked to

help out their parents, and two others indicated that they were substitute teaching to gain experience in the field.

INSERT TABLE 1 ABOUT HERE

Results

The intent of having preservice teachers view case study videos was an impetus for entering into a deeper form of metacognitive thought based on reflection of their thinking focused on the actions of a classroom teacher (Ball, 1996; Webb et al., 1997). A rating sheet was used to focus the observations and provide some record that could be useful as they worked through the ideas of lesson preparation, formation and delivery; and a means of data collection for analysis.

The preservice teaches had many questions even though the lesson plan rating instrument only differed slightly from the lesson planning form they were already using. Discussion about the lesson plan-rating sheet was detailed and insightful. Several concerns were raised. After a lengthy classroom discussion the preservice teachers/raters were ready to begin their observations. In most instances the full lessons had been reduced to 30 minutes and one to as short as ten minutes.

Inter-rater reliability on the instrument was first determined for each category. The indicators for all other categories (A, B, C, D, E, F, I, J. K) were treated as ordinal scale ratings, therefore, *Kendall's Coefficient* was used in determining inter-rater

reliability (Huck, 2000). The range of responses for each category was ranked by frequency. If all raters selected the same indicator, the numerator and denominator was the same, resulting in a 1 for inter-rater reliability. Other cases were less clear. For illustrative purposes Category D allowed for selecting only one indicator so it was possible for each of the three indicators to be selected by one-third of the raters (n=30). Therefore, the score for each indicator would be 10 raters selecting each of the indicators, so mathematically 10/30= .333 for each indicator. Then multiplying the score for each of the three indicators yields $.333^3$ approximately 0.0 or not meeting the case for inter-rater reliability. This aforementioned method was used for all categories except for G and H. In categories G and H, raters were expected to "mark all that apply" and the indicators were not intended to be hierarchical so the total score was used in determining inter-rater reliability and not whether specific indicators were common to all raters. A hybrid of *Cohen's Kappa* and *Kendall's Coefficient* was used to determine the inter-rater reliability. Categories G & H were not ranked but a raw score, making it inappropriate to use Kendall's *Coefficient* and more appropriate to use *Cohen's Kappa*, however, in the desire to assign a single number to reflect inter-rater reliability for these administrations a modified procedure was developed (Huck, 2000). The raw score data in Categories in G & H was converted to nominal scale and then submitted to the same mathematical calculations used for the other categories. Totals were collected for each category separately (G & H) and rank ordered by frequency. Each total was treated as nominal and

the same process as for the other categories was used to determine reliability. The range of totals can be "Not Applicable" (skipped) or from zero to five. This results in seven possible nominal variables. The inter-rater reliabilities are provided in Table 2. At the completion of the third observation the mean overall score exhibited better than 90% reliability. The 90% reliability indicates a high level of agreement among raters.

INSERT TABLE 2 ABOUT HERE

Lesson plans and journal entries of preservice teaching episodes were compared on a pre/post basis to video interventions. Lesson plans written pre-intervention were short and lacked sufficient detail and clarity for anyone other than the lesson plan developer to implement the activity. Little attention was given to concept development and a heavy reliance on multiple choice tests for assessment. Journal entries were rudimentary and took the form of reporting the events in the classroom. Preservice teacher journal entries of their lessons were broad and global. They did not reflect on why something went well or how an aspect of the lesson could have been improved. Student behavior was always referred to as being "acceptable" or "okay". Few substantive comments were made regarding their observations of the classroom teacher's teaching. General comments were, "I would like to teach like her some day", "The kids are always so quiet during Mr. X's lesson." and "Ms. Y is such a great teacher." Little or no notes

were made to substantiate broad statements like, "I think it [the lesson] went well.", "The students learned a lot!", or "The students enjoyed the lesson."

The review of post intervention lesson plans showed more dramatic changes compared with journaling. Lesson plans contained a great deal more detail and vastly improved clarity. Three lesson plans were selected from pre/post interventions and retyped with identifying characteristics removed. Preservice teachers were asked to rank-order six-lesson plans with the most effective ones at the top and least effective ones being toward the bottom with no knowledge that those plans were pre/post intervention or written by members of the class. Consistently, the post intervention lesson plans rated higher than pre intervention lesson plans. The 30 preservice teachers ranked the post intervention lesson plans in positions one, two, or three, which were considered the three highest positions. Justifications included, "Lessons one and two are more organized, easier to read, and almost anyone could follow them." and "Well, lessons five and six have most of the basic information, but are not clear and you can not tell [that] if by filling in the blanks you are doing what the teacher would have done." "It is very easy to see that lesson plans ranked in the top three are clearly more useful and easily reflect much more understanding of our math methods course." After that comment by one preservice teacher, the others agreed that there was a much greater distinction between the top three and the bottom three than there was within each of those categories.

In a review of pre/post intervention journal entries, preservice teachers did become more reflective regarding their observations of the classroom teacher but not so much so when it came to their own lessons. Many students commented on feeling confident and feeling well prepared for the lesson. Six preservice teachers wrote that the lesson had not gone as they planned and they felt that the students were having difficulty, but they did not reflect on what they could have changed or how the lesson could have been improved. Nor did the preservice teachers comment on reasons for the "feeling" or their interpretation that students were having difficulty. No preservice teacher acknowledged having any difficulties prior to the intervention.

Their journal entries exhibited more critical observations of the classroom teacher's lessons. Gone were the general comments lauding every action by the classroom teacher; replaced with comments dealing with communicating the objective to students, evaluating student learning, and selecting better activities and materials to better match state objectives. The preservice students had not become more negative, simply better consumers of field experiences. One recurring theme in many journals was explained by one preservice teacher this way, "The lesson was good [referring to the mentor teacher's lesson] but too much time was spent on other topics and side conversations." This revelation indicated a budding awareness of the importance of lesson continuity (Stigler& Stevenson, 1991).

Discussion

Inter-rater reliability of the scores provided by the Lesson Plan Rating Sheet are listed in Table 2. When considering the overall mean scores across videos, the inter-rater reliability steadily increased from 0.73,to 0.81, to .91. In the final application of the instrument, Video 3, all categories provided scores with an inter-rater reliability greater than .82.

Category stability is important when making generalizations about the raters and the instrument (Huck, 2000). Categories were considered stable when the difference between the highest and lowest inter-rater reliabilities was less than .1. Four categories, E, G, H, and K exhibited stable scores over the three videos. Of those four categories no inter-rater reliability was less than .83 for the three videos. This result is indicative that the raters were highly consistent in the way they classified the four categories across three videos. Seven of the categories exhibited greater differences in inter-rater reliability. During rating reconciliation, these categories elicited lengthy classroom discussion regarding indicator clarification. The vigorous discussion of the remaining seven categories demonstrated a larger dichotomy in beliefs and perceptions about the intentions of the indicators. This interpretation is one explanation for difference in interpreted stability and the lack of discussion of the categories exhibiting the greatest stability. Lengthy discussion of certain categories was the result of diversity in

experiences and the need for preservice teachers to explore new ideas and combine facts from methods instruction into concepts that they could apply to the task.

A high degree of inter-rater reliability and stability are not necessarily indicative of positive or negative results. They are merely indicators that verify the ability of the indicators to provide consistent results over three trials (Huck, 2000).

As many universities move to a professional development model which often immerses preservice teachers in school classrooms for three or fours days a week it becomes increasingly important to help preservice teachers develop reflective thought processes. It is difficult for preservice teachers to learn to evaluate what they see as classroom practice in light of what they are learning in their methods courses. Methods instructors often require reflective journals that more often than not reflect the preservice teacher's ability to summarize the day's happenings. Often, the purpose of such reflective journals are to help preservice teachers think about the teaching practices they are observing with respect to what they are learning in their methods courses. All too often preservice teachers are unable to achieve the lofty ideals of reflective thought. So the dilemma continues to persist. How do preservice teachers become wise consumers of field experience opportunities? This study indicates that if preservice teachers are provided meaningful experiences with a lesson planning document, encouraged to discuss the process, and embark on group reflection of video case studies (Zuckerman, 1997) they can move along the continuum of reflective thought more quickly. As a result,

they will make connections to their methods instruction and implement reform(Jenson, 1994; Wedman et al, 1999) ideas instead of succumbing to some of the less ideal practices happening in classrooms across America.

There is no one right way that can even be suggested as a best method of assisting preservice teachers to learn to effectively plan lessons and develop reflective practices. In this investigation the use of the lesson plan rating sheet and digital video enabled preservice teachers to reflect on the teaching practices they were watching while incorporating methods instruction. The discussion that followed each segment allowed each preservice teacher to think about how that section of the lesson plan fit her methods instruction. In doing so, preservice teachers thought about connections to what they were learning and seeing in the field component.

One reason why reflective thought is so slow in developing could be that preservice teachers are under the impression that their mentor teacher is the prefect model teacher and questioning or reflecting on the actions of the mentor would be inappropriate. Therefore, preservice teachers may be more amenable to critically evaluating the videotape lessons because they are less connected to the teachers depicted on the tape and the depicted teachers are not labeled "mentor". Once the rating was complete, a review of their journals indicated that a transfer of knowledge was taking place. The preservice teachers were making connections to their field placements, reflecting on the actions of their mentor and themselves. Their ability to thoughtfully and thoroughly plan lessons

improved. Although it is not evident if they learned to differentiate the person from the mentor role, but it was obvious that they were learning to become savvy consumers of field experiences.

Summary

This study indicates that videotapes can be used effectively to assist preservice teachers in becoming reflective practitioners. Future investigations may lead to increased use of such a process to enhance the professional development of preservice teachers. Educators should continue to develop this technology as one of the means of helping future teachers to become more thoughtful and reflective in the lesson planning process.

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Table 1

Participant Demographics

Area of Emphasis	Female	20-23	24-28	29+	Working	Hispanic
Early Childhood	11	8	2	1	1	
Elementary	4	3	1		3	
Generalists						
Mathematics	4	3	1		1	1
Science	3	2		1		
Social Studies	2	0	2			
Reading	4	4			1	
Bilingual/ESL	2	2			1	2
Total	30	22	6	2	7	3

Table 2

Inter- Rater Reliability by Category for Lesson Plan-Rating Instrument

Category	Inter-rater Reliability				
	Video 1	Video 2	Video 3	MEAN	SD
A. Instructional Objective	.53	.69	.98	0.73	0.23
B. State Level Objective	.86	.79	.92	0.86	0.07
C. Materials	.79	.84	.95	0 86	0.08
D. Background Information	.67	.65	.88	0.73	0.13
E. Learning Environment	.83	.86	.92	0.87	0.05
F. Focus	.40	.79	.83	0.67	0.24
G. Teaching Procedure	.88	.86	.91	0.88	0.03
H. Explanation	.90	.86	.93	0.90	0.03
I. Extension	.55	.72	.87	0.71	0.16
J. Closure	.77	.87	.90	0.85	0.07
K. Assessment	.85	.94	.94	0.91	0.05
Means	0.73	0.81	0.91	0.82	

Note. N=30

Appendix A

LESSON PLAN FORM

Intern: _____ **Date:** _____
Mentor Teacher: _____ **# of Students:** _____
Grade Level: _____ **Time Frame:** _____

Instructional Objective: (Observable)
State what students should know and be able to do after completing the lesson.

Texas Essential Knowledge and Skills (TEKS):
(Write out each TEKS statement and provide number and letter where appropriate.)

Materials:
Identify the quantity of various materials needed for the activity. Do not forget audio video equipment when needed.

Getting Ready for the Lesson: (Background Information)
Provide information necessary for the instructor to carry out the activity. It may be necessary to provide some content information here or to indicate where to find certain materials for the activity.

Preparation of Learning Environment:
In this section, describe how you will arrange the room for the instructional activity. You may need to explain how groups will be formed and managed; how a learning center will be used during lesson; or how certain manipulatives should be distributed during lesson.

Focus: (Also can be called Motivation, Set, or Engagement)
Include something to capture student interest and motivate them for learning. This may be in the form of a question or doing a demonstration. Be creative but make sure it connects to the overall lesson objective. After focus, state lesson objective to students.

Teaching Procedure:
Provide details for the activity that is planned. Indicate how the activity should be done and what questions may need to be asked. Keep in mind to use cooperative learning, methods of inquiry or investigation when possible and to integrate content areas as much as possible in activities.

Explanation and Practice:
In direct instruction situations, students may be guided through models or examples, then provided independent practice. If students are exploring and investigating in activity first, you may allow students to explain results, follow with questions, and then provide necessary content information or expected solutions based on student experiences and questions.

Modifications: (Also can be called Corrections or Reteach)
Suggest what you will do to reteach the lesson or modify the lesson for students who are having difficulty understanding concepts or skills taught in lesson.

Going Further: (Also can be called Extensions or Elaboration)
Suggest here ways to extend the activity for students. Indicate what students could do to apply the concepts and process skills learned to new situations. This can be used as extended activities for students who complete work and are ready to move on. No new information is taught here--students are applying what they have learned in the lesson to a new context.

Closure:
Bring the lesson to a close. Restate the instructional objective. You may want to summarize activities or ask students to respond to questions to check for student understanding of the basic concepts addressed by the activity.

Assessment: (Evaluation)
Explain how you plan to assess students, and include any materials that are needed. Include the scoring rubric you would use for evaluation purposes when appropriate.

Reflective Evaluation of Lesson:
Reflect on your own teaching. What went well in the lesson, and why do you think it went well? What can you do to improve the lesson for next time?

Appendix B

LESSON PLAN RATING SCALE

Observed: _____ **Date:** _____

Observer: _____ **# of Students:** _____

Subject/Grade Level: _____ **Time Frame:** _____

A. *Instructional Objective: (Observable) (3 pts.)

A teacher should state in some form the objective(s) of the lesson which should include what students should know and be able to do after completing the lesson.

The teacher stated the objective of the lesson. ___
The teacher explained the objective. ___
The teacher discussed the objective and all components of the indicator. ___
Total ___

B. *Texas Essential Knowledge and Skills (TEKS) (2pts.):

It is important that each objective be correlated to a specific state level objective. It is not important that the teacher mentions it but it should be found in a copy of the state document. Identify each applicable TEKS by numerical equivalent and provide number and letter where appropriate.

At least one grade level TEKS is identified YES☐ NO☐
If no, than proceed to Materials

Identify TEKS: _____ 2
_____
_____

Total ___

C. Materials (4pts.):

Lessons should include more than a textbook/worksheet and the use of the overhead/board as a means of delivery. Materials should be hands-on and provoke interest and active involvement on the part of students.

More than basic materials are used. YES☐ NO☐
If no, than proceed to Background Information
The students are actively involved. YES☐ NO☐

Identify the types of various materials used for the activity. Do not forget audio and/or video equipment.

_____
_____
_____

More is not better. Award points based on how well the materials fit the topic. Is anything about the materials distracting? Was the use organized? Are there items better suited for the objective(s)?

1 2 3 4

Total ___

D. Getting Ready for the Lesson: (Background Information 3pts.)

It is important that learning be framed for students. Teaching is more effective when students have an advance organizer. It may be necessary to provide some additional support and/or check prerequisite skills. *Select only one indicator.*

1. Demonstrated some aspect of understanding of the importance of learning theory. ___
2. Explicitly used aspects of learning theory. ___
3. Used example(s) from a previous lesson or provided review. ___

Criteria 3 subsumes 1 & 2

Total ___

E. Preparation of Learning Environment (2 pts.):

The arrangement of the room and students are important to how a lesson is taught and whether it corresponds to the type of lesson being taught. For some lessons it is fine to have neat rows and for other lessons small groups sitting on the floor. The room and student arrangement should facilitate the lesson.

The learning environment matches the proposed learning. YES☐ NO☐

If no, than proceed Focus

Select only one indicator.

The learning environment enhances the proposed learning objectives. ___

The learning environment is creative and/or flexible. ___

Total ___

F. Focus: (Also can be called Motivation, Set, or Engagement) 3 pts.

Something should be used to capture student interest and motivate them for learning. This may be in the form of a question or doing a demonstration. It may be very creative or very common but it must connect to the overall lesson objective.

A focus was used. YES☐ NO☐

If no, than proceed to Teaching Procedures

Select only one indicator.

The focus was common and required little preparation. ___

The focus was common but quite effective. ___

The focus was original, elaborate, or particularly efficient. ___

Total ___

G. Teaching Procedure (5 pts.):

The actual teaching practices should be clear and concise. Time should be used effectively and efficiently. There should be few interruptions to the continuity to the lesson. Teacher digression should be avoided. Content area integration should be done cautiously to ensure clarity and simplicity.

The teaching procedure is organized and planned. YES☐ NO☐

If no, than proceed to Explanation

Mark all that apply

The teacher avoids digression or off-topic discussion.	___
Student involvement is sincere and they are asked questions that require thoughtful answers	___
Time is used effectively or efficiently.	___
Interruptions are minimized.	___
Integration is used effectively or not at all	___
Total	___

H. Explanation and Practice (5pts):

It is important for classroom discourse to occur. The kind and quality are often dependent on the lesson. In direct instruction situations, students may be guided through models or examples, then provided independent practice. If students are exploring and investigating an activity first, students may be allowed to explain results, followed by questions, and then provided with necessary content information or expected solutions based on student experiences and questions. This section focuses more closely on the specifics of what the teacher says and does.

The explanation and practice is more than seatwork. YES☐ NO☐

If no, than proceed to Extensions

Mark all that apply

The teacher's content is accurate and mistakes are acknowledged.	___
The teacher provides work or samples that are worthy of the objective(s).	___
The teacher includes both positive and corrective feedback.	___
Specific questions are higher order and varied.	___
Many students are called on to respond to questions.	___
Total	___

I. Extensions: (Elaboration) (2 pts.)

Is the lesson discrete? Is the learning connected in some way to either other topics within the same discipline or to a topic in another discipline? Could students apply the concepts and process skills learned to new situations.

Select only one indicator.

The extensions are implicit and obvious.	___
The extensions are explicit and well planned.	___
Total	___

J. Closure (3 pts.):

It is important to both begin and end by telling the learner the objectives of the lesson. The teacher should restate the instructional objective, summarize activities or ask students to respond to questions to check for student understanding of the basic concepts addressed by the activity leading to the assessment.

Select only one indicator.

The objective(s) were restated or reviewed.	___
The objective(s) and lesson activities were restated or reviewed	___
The objective(s) and lesson activities were restated or reviewed and	

appropriate questions leading up to the assessment were asked. ___

Total ___

K. *Assessment: (Evaluation) (4 pts.)

Students should know how you plan to assess them. Assessment materials should be prepared in advance and ready for use. Alternative assessments should include scoring rubric that students are familiar with or a unfamiliar one is completely explained.

The assessment matches the objectives and TEKS. YES☐ NO☐

Select only one indicator. If no, than you are complete

The assessment is a routine paper and pencil task. ___

The assessment is a non-routine paper and pencil task. ___

The assessment incorporates journaling, drawing, or creating a product. ___

The assessment includes the whole class, is authentic, is original, and is meaningful. ___

Total ___